Craft: **Mosaic Tiles**

A. **Description Statement** of the Craft Activity (include degree of complexity, min/mod/expensive project, and settings/clientele analysis) (your reader is another OT practitioner attempting to decide whether to use it in their practice):

This craft activity is great for self-expression. Individuals can also work on increasing their fine motor skills, UE range of motion and endurance, and processing skills such as attention, planning, and organizing. This craft can be used in a variety of settings such as pediatrics, geriatrics, mental health, etc. It is a moderately/expensive project, especially for a group of 6 clients. They do sell individual kits that may be less costly if having a one-on-one treatment session.

B. Sequence of steps to complete the activity:

<table>
<thead>
<tr>
<th>Steps</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gather materials</td>
<td>30 sec</td>
</tr>
<tr>
<td>2. Plan design of tile</td>
<td>5 min</td>
</tr>
<tr>
<td>3. Choose tile pieces</td>
<td>10 min</td>
</tr>
<tr>
<td>4. Cut tiles to fit (optional)</td>
<td>5 min</td>
</tr>
<tr>
<td>5. Pour grout mixture with scapula in the plastic tile mold. Spread grout evenly.</td>
<td>3-5 min</td>
</tr>
<tr>
<td>6. Place tile design on top of grout.</td>
<td>5 min</td>
</tr>
<tr>
<td>7. Lightly rub excess grout off the tiles with a wet sponge. Do not rub grout out of the cracks.</td>
<td>5 min</td>
</tr>
<tr>
<td>8. Allow grout to dry overnight.</td>
<td>24 hours</td>
</tr>
<tr>
<td>9. Reapply grout if needed</td>
<td>3-5 min</td>
</tr>
</tbody>
</table>
10. Let dry 24 hours

11. Spray Sealant onto project 30 sec

<table>
<thead>
<tr>
<th>Time =</th>
<th>Total</th>
</tr>
</thead>
</table>

30-35 min (without the overnight drying)

B. Precautions (consider safety in tool use, cultural variables, for mental health or specific physical Dx):

- Mixed grout may cause dust in the air, which may be a safety concern for respiratory patients.
- Tile nippers are sharp and tile are sharp, may cut skin.
- Goggles may be needed when cutting mosaic tile. Flying chips.
- Consumption of grout.

C. Special Considerations (gender bias, age appropriateness, completion time – how many 45 min sessions are needed, popularity, etc.)

I consider this is a very gender neutral activity. The client is free to make decisions when it comes to picking what color scheme and designs they would like on their tile. It is known that mosaic crafts can be done with children too, especially if you down grade the activity by already having precut tiles that are not so sharp or using other materials such as seeds, buttons, beans, and glue. I even saw a Lego mosaic piece on Pinterest. Same goes with the elderly population that do not have the strength and endurance to cut the tile with nippers. Mosaic tiles has been popular for years and is still a craft used today in many settings and for home decoration. This craft usually takes one 45 minute session, but might take two to fully complete since it requires to dry overnight.

D. Craft Financial Analysis (tools, materials, supplies) based on a group of 6 clients:

<table>
<thead>
<tr>
<th>Equipment/Tools</th>
<th>Cost</th>
<th>Expendable Materials &amp; Supplies</th>
<th>Cost</th>
<th># or amount needed</th>
<th>Cost for 6 Clients</th>
<th>Store (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic tile mold</td>
<td>$1.99</td>
<td></td>
<td></td>
<td>6</td>
<td>$11.94</td>
<td>Michaels</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Price</td>
<td>Qty</td>
<td>Total</td>
<td>Source</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------</td>
<td>--------</td>
<td>-----</td>
<td>---------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Mosaic tiles</td>
<td>$10.75 1 bag</td>
<td>$10.75</td>
<td>6</td>
<td>$65.46</td>
<td>Amazon</td>
<td></td>
</tr>
<tr>
<td>Tile Nippers</td>
<td>$10.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponge</td>
<td>$1</td>
<td></td>
<td>6</td>
<td>$6</td>
<td>Dollar Store</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Free</td>
<td></td>
<td></td>
<td>Free</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grout</td>
<td>$9.99 1 container</td>
<td>$9.99</td>
<td></td>
<td></td>
<td>Amazon</td>
<td></td>
</tr>
<tr>
<td>Spatula</td>
<td>$1</td>
<td></td>
<td></td>
<td>$6</td>
<td>Dollar Store</td>
<td></td>
</tr>
<tr>
<td>Krylon Sealant</td>
<td>$6 1</td>
<td>$6</td>
<td></td>
<td></td>
<td>Walmart</td>
<td></td>
</tr>
</tbody>
</table>

Start Up Cost: $13.90
Expendable Cost: $26.74
Grand Total Cost: $116.14

Estimated Time & # of Tx Sessions for Activity Completion: 30-35 minutes

E. Activity Environmental Demands and Organization
   Indoor/Outdoor/Ventilation space required:
   - Flat surface such as a table to perform task
   - Chairs so that client can sit
   - Open space
   - No clutter with all materials organized for task

Room set-up for safe tool use/furniture required:

Large room with adequate lighting. Cords are properly placed and floor is not wet to prevent falls. A larger table with comfortable seating for the group. All sharp materials like nippers stored properly and only taken out when needed.

F. Therapeutic Qualities of the Craft
   a. Organization/Order requirements of the client (be clear to consider each of these components and describe how the client does these in relationship to the craft activity)
1. searches/locates: Client should be able to locate materials on table during task. Client should be able to locate sink to wash hands and grout off tools.
2. gathers: Gathering material before and after task.

3. organizes: Organize everything on the table, within arms reach.
4. restores: Extra material must be placed back in cabinets/closets. Craft should be placed in on the countertop to dry.
5. navigates: Proprioception- Needs to be aware of position of one's body in relation to the environment. Needs vestibular balance whether sitting down or standing up.

b. Repetition requirement (steps, motions, etc):

AROM in arms, hands, and wrist
Fine motor and finger dexterity
Attention to detail (when to repeat same steps in craft)
Flow of arm, hand, wrist, and fingers working together

c. Expressive/Creative/Projective allowances:
1. expressive qualities: Ability to pick tiles shapes and colors.
2. creative qualities: Ability to choose a design for project or create one.
3. projective qualities: Ability to feel personal gratification towards completed project.

d. Sensory requirements (be descriptive if/how each sense is required for the activity AND could one sense compensate for another?)
- Visual: Seeing objects and environment. See if grout is even and seeing where to place tile in project and how to arrange it.
- Tactile: Touching of objects. Wet surface indicates that the project is not done. Compensate with visual techniques.
- Proprioceptive: Awareness of position in space. Lets you know how far the craft is, what motions you are doing with your UE joints. Sense of touch and visual techniques can compensate for this sense.
• Vestibular: **Maintaining proper balance while sitting/standing and performing activity or walking to gather materials or clean tools.** Proproception could help compensate for loss of this sense.

e. **Time Management**
Method recommended to work on time management goals with this craft activity:

- Know how long it takes for project to dry up.
- Know how long it takes to create design and choose tiles and whether it needs cutting.

f. **Proper Body Mechanics/Positioning required (consider all steps to the activity)**

- While sitting, assure that the client has both feet on the floor on for a proper wide base of support.

- Keep the client at a 90/90/90 position when sitting.

- When standing, client should have knees slightly bent, which tightening stomach and buttocks muscles.

- If object/materials fall, avoid simultaneously bending and turning Use step stool for objects in hard to reach areas.

- Client should take a break after sitting for 30 minutes.

- Use a good foot stride when walking.

g. Could this activity promote Static or Deforming Postures (grip, total body, etc)—list:
Yes, inability to maintain a proper upright position when sitting can deform posture. The use of spatula in hand can cause static grip.

h) Mental Functions as they can each relate specifically to the craft activity:

1. Orientation - knowing that they are in therapy, knowing what craft they are working on, knowing the time and day.
2. Attention - Paying attention to directions of craft, sustaining attention through out task, paying attention to environment and safety concerns, being able to concentrate on task while ignoring other stimuli (selective attention).
3. Memory - Short term memory for instructions and working memory for sequencing.
4. Perceptual - Use of sense. Feeling for texture, is grout dry or wet? Listening to the practitioner’s instructions or others in group therapy, visually seeing and reaching object, etc.
5. Thought - Ability to stop measurement of grout. Ability to think of when to know when to wash hands and tools.
6. Calculation - Calculating how much grout is needed. Calculating space between tile.

i) Communication/Interaction as it can be implemented specifically to this craft activity:

1. Gazes - Looks at instructor during explanation of activity. Looks at other group member’s project.
2. Gestures - Uses hand gestures when pointing at objects, such as the grout or pieces of tiles.
3. Orients - Knowing when to move to the next step during task.
4. Articulates - Clearly and easily expresses thoughts on the project.
5. Asserts - Picks a specific design and sticks with it. Gives their own opinion about projects. Helps other group members with their projects.
7. Engages - Talks to instructor and others during therapy.
8. Expresses - Expresses emotions, whether excitement, sadness, anger, etc towards projects or others.
9. Shares- Shares space with others, shares materials, thoughts and feelings relation to project.
10. Collaborates- Participates in therapy. Knows when to take turn on speaking about project and when to listen to others.
11. Conforms- Follow instruction of project. Knows when to wash hands and tools.
12. Focuses- Focuses on task. Doesn’t get distracted with other stimuli.
13. Relates- Relates activity to interest or memory. May state what they will use tile for in the future.
14. Respect - Respects other group member’s project and the practitioner’s time during therapy.

Grading the Activity

- Energy used
  i. Standard amount of energy required (describe and apply a reasonable average MET level)

  Even though the client can be sitting down for the majority of craft task, small craft projects are listed under MET levels 1-3. Energy is used when spreading grout to mold.

  ii. Adapt craft activity to require more energy expended

  Client can help mix the grout. You can increase sizes of tile and make a bigger project. Client can count the tile.

  iii. Adapt craft activity to require less energy expended

  Have grout spread on mold already and just have client choose design and place pieces of tile on grout.

- Size of craft
  i. Standard
     4 x 4”

  ii. Increase difficulty:
     Use larger mold or larger project. Mosaic has been used for ages and or often seen in furniture (tables) or even walls (mosaic murals).
iii. Decrease difficult

**Decrease size.** Pinterest has small projects like mosaic tile pendants.

**Tools**

i. **Standard**

*Grout, small tile, tile nippers, sealant spray, mold, sponge*

ii. **Increase difficulty**

*Big tiles that will require use of nippers*

iii. **Decrease difficulty**

*Instead of tile use other materials such as beans, CDs, glue.*

**Weight**

i. **Standard**

*Weight is about a pound.*

ii. **Increase difficulty**

*Heavier, bigger project, deeper mold to increase weight (e.g. gardening stepping stones).*

iii. **Decrease difficulty**

*Use beans, seeds, broken CDs, anything lightweight.*

**Texture**

i. **Standard**

*Ceramic tile*

ii. **Increase difficulty**

*Pebbles, rocks, mirrors*

iii. **Decrease difficulty**

*Beans, seeds, broken CDs, paper, plastic tile*

**Positioning/planes recommended (against gravity, gravity assisted, gravity eliminated)**

i. **Standard**

*Uses all plane and positioning in relation to gravity.*

ii. **Increase difficulty**
Mosaic art can be done on a wall, encouraging to use trunk and UE muscles (anti-gravity)

iii. Decrease difficulty
Mold could be set sideways and the client will just place the tiles in gravity eliminated position.

• Environmental
  i. Standard
     This activity could be done in many settings such as: therapy room, client’s room, craft lab, mental health, etc.
  
  ii. Increase difficulty
     Place client in unfamiliar setting.

  iii. Decrease difficulty
     Place client in familiar setting. Calm and quiet environment.

Diagnostic Adaptations:

A. How to adapt the activity (promoting success) for someone who is a wheelchair user: Make sure tables are wheelchair accessible and easy to roll under. Materials and tools are within arms reach. Sink is wheelchair accessible.

B. How to adapt the activity (promoting success) for someone who has a visual impairment (give example(s) of each bullet)
   Low Vision:
   • High contrast: Use high contrasting colors of tiles or use light or white tiles that are glued onto dark brown grout.

   • Lighting: Increase lighting.

   • Magnification- Increase tile size! Use magnifiers.

   • Decrease Visual Clutter: Have only items needed for craft within reach.

   • Scanning Technique: Place bright tape by tiles to neglected side or use bright colored tiles.

   No Vision (discuss use of the “clock” method):
Verbally instruct the client on steps of activity. Use the clock method to orient the client to where tool and materials are to them.

C. Cardiac/Respiratory/Low Muscle Endurance/General Weakness (give example(s))

**Low Endurance**

- **Pace:** Constant pace during the entire activity.
- **Strategies for Weakness (lightweight materials):** Use beans, paper, glue, seeds. Other lightweight materials to create this craft.
- **Avoid stressful/static positions:** Encourage client to take breaks and stand up during activity, realign posture and sitting positions often.
- **Avoid individual stressors:** Talk about any emotional complications, carefully instruct activity and use of tools properly, tell them what to expect concerning time, make sure the activity is enjoyable to client.

**Energy Conservation**

- **What can be completed beforehand:** Precut tile, Mixed grout, have all materials laid out where client is going to work.
- **How would you organize yourself and the activity:** Place things in order for client. Make sure everything is within reach.
- **What unnecessary tasks could be eliminated:** Mixing grout and cutting tile. Have several shapes available for client.
- **Best positioning for energy conservation:** 90 degree in hips, 90 degree in knees, and 90 degree in feet. Have table at appropriate height.

D. Arthritis (what to consider and what adaptations may be needed):

**Proper body mechanics. Lightweight tools to substitute for tiles such as seeds, beans, rice, CDs, paper. Use glue instead of grout and adapted scissors instead of tile nippers or even have items precut.**

E. Tremors/Incoordination (give example(s) of “how” for each bullet)

- **Stabilize object:** Use weight tools, Increase tile weight.
• Stabilize proximal body parts: **Use wrist weights, splints or hand over hand techniques.**

• Use of assistive device to provide stability and reduce slipperiness: **Grip gloves, grip tape on tools, weighted tools.**

• Increase weight of tools: **Tape washers to nippers.**

• Adaptation to substitute for precise fine motor requirements: **Use slightly bigger heavier tile pieces.**

F. CVA (one-handed technique—describe)

**Client can break item like plate instead of cutting tile nippers. Client may use on handed techniques to place tile on grout or use unaffected arm to help affected arm, etc,**

G. Spasticity (what must be considered to decrease or keep tone below spasticity level; what could cause increase of tone with this activity):
**Splinting could be used to facilitate or inhibit tone of client. Prepatory activities such as fast brushing, quick stretching, or E-stim can facilitate tone. And modalities such is as deep pressure, weight bearing, and slow stretch could inhibit tone.**

H. Person with quadriplegic SCI

• **Highest cervical level that a person could successfully complete this project and describe functioning that is available at that level:**
  **C7 with adaptations. Clients have the use of triceps, flexor carpi radialis, fingers extensors, elbow extension, and wrist extension. Client has the use of some hand movements. May be able to grasp with thumb and compensation of other fingers.**

• **How could you modify the craft activity to promote success?**
  **Use slanted board to place project in. Already have grout mixed and spread on mold. Have client use their wrist extension and thumb and index finger grip to grab tile and place it on grout. Use bigger tile sizes for easier grasp. Client may need to use both hands. Have tiles within reach. Instead of sealant spray, may apply liquid sealant with brush with the use of AE.**
• What degree and what kind of assistance is needed—list in relationship to the steps of the activity:

**Moderate assistance. Client may be able to mix grout and apply it with adaptations, but it may not look as smooth so maybe some HOH assists might help. Practitioner may also provide visual or verbal cues on how to hold tile before placing it on grout.**

**If you have found any You-Tube videos or web-based sources to support your claims—please provide the link/website for the instructor to view.**

References
http://www.thejoyofshards.co.uk/projects/safety.shtml

http://www.strokeSMART.org/article?id=139
Article specifies that client breaks tiles and glass.
https://www.pinterest.com/pin/309270699386285125/
Client with C6/C7 injury explains how he holds things. At the end of the video he is holding a iPhone. I figured if he can hold that he can hold a larger tile.

https://quizlet.com/25146634/crafts-flash-cards/
Discusses safety issues and goals

https://www.pinterest.com/pin/112238215683431573/
Mosaic tile pendant

https://www.pinterest.com/pin/87046205275371306/
CDs mosaic project

https://www.pinterest.com/pin/114982596709707218/
Paper mosaic project

https://www.pinterest.com/pin/203436108145349361/
Lego mosaic piece

Crafts in Therapy and Rehabilitation by Margaret Drake